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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/496,188	02/02/2000	David Cushing	2566-104A	5851

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EXAMINER

BERGIN, JAMES S

ART UNIT	PAPER NUMBER
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3624

DATE MAILED: 09/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/496,188

Applicant(s)

CUSHING, DAVID

Examiner

James S. Bergin

Art Unit

3624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,3,5. 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 8, "optionally containing" is infinite as it is not known whether the applicant is positively claiming that a portion of the orders contain the desired order parameter.

In claim 11, line 26, and in claim 21, line 22, the scope of "predetermined criterion" is not known and is thus indefinite.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. For a claim to be statutory under 35 USC 101 the following two conditions must be met:

1) In the claim, the practical application of an algorithm or idea result in a useful, concrete, tangible result, and

2) The claim provides a limitation in the technological arts that enables a useful, concrete, tangible result.

See MPEP Section IV 2 (b). Also note in re Waldbaum, 173USPQ 430 (CCPA 1972) which teaches "useful arts" is synonymous with "technological arts". In Musgrave 167USPQ 280 (CCPA 1970), In re Johnston, 183USPQ 172 (CCPA

1974), and In re Toma, 197USPQ 852 (CCPA 1978), all teach a technological requirement.

Claims 1-10 and 21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Specifically, the claims make no reference to technology such as a method performed using a computer, a computer system for performing the method or a computer storage media having stored thereon the instructions for performing the method.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rickard et al. (US 6,016,483 A: reference cited on Information Disclosure Statement filed 9/28/01, paper 5).

Regarding claims 1, 11 and 21, Rickard et al. disclose a method for identifying a price at which to conduct a batch auction of a financial asset, comprising the step of determining a single opening price, which maximizes the trading volume for the particular asset (see abstract and column 9, lines 33-47). In an instance where no such price exists, the Rickard et al. disclosure includes an awareness of the possibility of an imbalance of purchase requests of the particular asset to sale requests of the particular asset; *"If there is a residual imbalance of non-executed public orders, the residual*

imbalance of non-executed public orders is assigned to individual ones of the plurality of market makers so as to minimize a cumulative measure of deviation between the desired target position and the current position of each market maker”(see abstract).

Rickard et al. appears to be silent on the calculation of an imbalance ratio, and determining the selected price based on the result of a comparison of said imbalance ratio to a predetermined reference value. The examiner takes official notice that calculation of an imbalance ratio is elementary and using a comparison of this calculated imbalance ratio with a predetermined reference value (such as a preferred target price) to determine a selected price at which to trade the particular asset, is old in the art and would have been obvious to one of ordinary skill in the art of trading financial assets at the time that the invention was made, so as to efficiently match and trade previously non-executed public orders.

Regarding dependent claims 2-10 and 12-20, the limitations contained therein are either specifically disclosed by Rickard et al. or would have been obvious in view of official notice that the limitations define only that which is old in the art of trading financial assets, and it would therefore have been obvious to one of ordinary skill in the art at the time that the invention was made to include these claimed features in the Rickard et al. trading method and system, so as to assist in the process of efficiently matching and trading previously non-executed public orders.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. May (US 6,421,653 B1), discloses a batch auction that is based on a fair price and executed for a maximum volume.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Bergin whose telephone number is 703 308-8549. The examiner can normally be reached on Monday - Wednesday and Friday, 8.30 - 5.30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin can be reached on 703 308-1065. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308-1113.


JSB

9/5/03


DR. GEOFFREY R. AKERS, P.E.
PRIMARY EXAMINER